

# SYSMAIN Rules

All SYSMAIN functions can be performed on processing rules.

The processing rule environment specification must always correspond to the relevant DBID and FNR of the FDIC files.

If Predict is installed, it is recommended that you use Predict instead of SYSMAIN for the processing of rules.

This section covers the following topics:

- Rule Menus
- Processing Status
- Direct Commands for Rules
- Rules in Batch Mode

## Rule Menus

The Rules menu contains all of SYSMAIN functions for the processing of rules (there are no subfunction menus for rules):

```

19:12:03          ***** NATURAL SYSMAIN UTILITY *****          1999-11-18
User SAG                      - Rules -                      Library SYSMAIN

                                Code  Function
                                C    Copy    Rules
                                D    Delete  Rules
                                L    List    Rules
                                M    Move    Rules
                                R    Rename  Rules
                                ?    Help
                                .    Exit

Rule      Code ..... C                      Sel. List ... Y
Name ..... _____                      Type ... ____
New Name .. _____

Source    Database .. 10__ File .. 50__ Name ..... _____
Target    Database .. 10__ File .. 60__ Name ..... _____
Options   Replace ... N

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit Copy Del          List Move Ren  Fsec Fdic

```

The Rule Type is used as part of the selection criteria. Since processing rules are either automatic rules or free rules, only types **A**, **F** or **AF** apply. Only rules which were cataloged with the specified type are selected. With type **AF**, both automatic and free rules are selected. If the Type field is left blank, no verification takes place.

If selective processing has been selected, a selection list is displayed with the following items of information:

Rule Name	The name of the rule that meets the selection criteria and therefore appears on the list.
Type	The type of the selected rule; that is, free rule or automatic rule.
Ver. Type	The verification type is an attribute of the rule which is directly taken from the verification as defined in Predict. A value of Unknown indicates that there is no corresponding verification information in Predict available. For valid values, see the relevant Predict documentation.
Format	The format type is an attribute of the rule which is directly taken from the verification as defined in Predict. A value of Unknown indicates that there is no corresponding verification information in Predict available. For valid values, see the relevant Predict documentation.
Message	The message which indicates the current processing status of the selected rule. See also the following section.

If there are more rules selected than can be displayed on a single screen, the additional rules can be displayed by pressing ENTER.

## Processing Status

A help character (?) in column **C** (code) to the left of the rule name invokes a window that lists the options available for the specific function.

If you want to select a specific rule for processing, enter option **A** (Process Rule). After the individual rules have been selected on the selection list, they are processed by SYSMAIN and one of the following processing status messages is displayed in the message column.

Message	Explanation
Replaced	Replace option was set to <b>Y</b> and the target rule was deleted before the COPY or MOVE function was completed.
Not Replaced	Replace option was set to <b>N</b> , a rule with the same rule name already exists in the target environment, and no new name has been specified; function not completed.
Err: NAT4852	A Natural Security violation occurred; function not completed.
Exit: <i>nnn</i>	A user exit routine was active and a non-zero return code was returned by the exit ( <i>nnn</i> = the return code); function not completed. See also User Exit Routines.

The other options which can be entered on a COPY, DELETE, LIST, MOVE or RENAME selection list have the following meanings:

List DDMs and Fields for this Rule	All DDMs and fields which have the specified rule assigned are displayed. Upon completion of processing the message File Listed is returned.  This option only applies to automatic rules.
Hardcopy of Saved Rule	The rule(s) specified are printed and listed on the screen. Upon completion of processing the message Printed is returned.  This option only applies to saved rules.
List Directory Information	This option lists the source directory of the specified rule(s). Upon completion of processing the message Directory is returned.
List Saved Rule	The source code of the rule specified is listed. Upon completion of processing the message Listed is returned.  This option only applies to saved rules.

## Direct Commands for Rules

The direct command syntax for processing of rules is shown in this section. (Since the *where-clause* and *with-clause* syntax are identical for each command, they are only shown once with the COPY and MOVE command syntax below.)

### COPY and MOVE Direct Command Syntax

```
{  
COPY  
MOVE  
} RULE name [AS new-name] FM [where-clause] TO [where-clause] [with-clause]
```

#### where-clause

```
[WHERE] [DBID dbid] [FNR file-nr] [NAME name] [CIPHER cipher ]  
      [{  
      PASSWORD  
      PSW  
      }] password ]  
      [DIC (dbid, fnr, psw, ciph)]  
      [SEC (dbid, fnr, psw, ciph)]
```

#### Note:

Commas must be used as separators between the values following the DIC and SEC keywords; or if a value is missing. For example: DIC(10,,secret,2a). If the Natural session parameter ID has been set to a comma, use a slash (/) sign as the separator between values.

#### with-clause

```
[WITH] [TYPE type] [REPLACE] [HELP] [MON]
```

#### Examples:

```
C RULE TESTRULE FM FNR 20 TO FNR 24 REPLACE  
COPY RULE C< FM FNR 20 TO FNR 24
```

```
M RULE TESTRULE FM FNR 20 TO FNR 24 REPLACE  
MOVE RULE C< FM FNR 20 TO FNR 24
```

## DELETE Direct Command Syntax

```
DELETE RULE name [with-clause] [IN [where-clause]]
```

### Example:

```
DEL RULE DEMORULE IN DBID 12 FNR 27
```

## LIST Direct Command Syntax

```
LIST RULE name [IN [where-clause]] [with-clause]
```

### Example:

```
L RULE * DBID 1 FNR 5
```

## Rules in Batch Mode

A report is provided to show the status of rules processed in batch mode.

### Note:

By using Online Report Mode, you can obtain the SYSMAIN batch report online. If required, you can also obtain a hardcopy of the report using the %H option.